



REQUEST FOR PROPOSAL

MATERIAL TESTING SERVICES

JUNE 2015

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1. SCOPE OF WORK

The City of Belmont is accepting proposals from qualified firms for on-call Material Testing Services for various City construction projects. The material tests are divided into the following sections:

- Soils and gravel testing
- Asphalt testing
- Concrete testing
- Exploratory drilling testing
- Miscellaneous

The Suggested minimum qualifications for the Material Testing:

- The firm should have at least three years of experience in materials testing and/or construction.
- Must be experienced with Caltrans methods.
- Testing laboratory should be accredited by Caltrans.
- Should be able to meet requirements in the attached QAP.

2. CONTRACT TERMS

The contract will be issued by the City of Belmont. The term of the contract will be three (3) years. A sample of the City's Standard Services Agreement is attached for your review. Comment on this agreement should be included with your proposal.

Prevailing Wage

Consultant shall comply with the State of California's Prevailing Wage Rate requirements in accordance with California Labor Code, Section 177, and all federal, state and local laws and ordinances applicable to work.

Section 1720 of the *State Labor Code* which states in part: "For purposes of this paragraph, "construction" includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work."

Fees

Consultant fees shall be negotiated and established on a time and material basis with a not to exceed amount, supported by an agreed schedule of rates and mark-ups. The provisions of 48 CFR, Part 31, et seq, "Cost Principles and Procedures," and 49 CFR, Part 18, "Uniform

Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments" will apply to the consultant contract and to all subcontracts in excess of \$25,000.

Progress invoices will be paid on a monthly basis related to the progress of the work. Fees for sub-consultants involved in this project hired by the consultant shall be approved by the City in advance of incurring such fees. City reserves the right to change the funding of the project.

3. PROPOSAL REQUIREMENTS

Proposals shall be submitted on or before 2:00 p.m. on Wednesday, July 22, 2015. The City reserves the right not to accept late submissions.

Proposals shall be submitted in either of following ways:
Three (3) copies of the proposal are to be submitted to:

Bozhena Palatnik - Associate Civil Engineer
City of Belmont Public Works Department
1 Twin Pines Lane, Suite 385
Belmont, CA 94002-3890

or

PDF of the proposal emailed to bpalatnik@belmont.gov

The proposal shall be simple and include only relevant information as listed below:

1. Firms.

Identify the types of material testing provided by your firm indicated in the scope of work. Indicate relevant experience in providing on-call material testing as services for public agencies.

2. Approach

Your proposal should include your approach to conducting the testing, including quality control measures.

3. References

Provide references for three clients you have provided materials testing services for, with current verified telephone numbers.

4. Agreement for Service

The contract will be issued by the City of Belmont. A sample of the City's Standard Services Agreement is attached for review. Requests to clarify and/or amend any item in this agreement must be included with your submittal.

5. Fees

Firms are requested to submit prices for testing items listed in the scope of work. It is not necessary to submit prices for every section. Prices may be submitted only for sections reflecting the specialty areas of a firm. However, if you choose to make a proposal for any one or more of the sections above, you must provide a price for each item in that particular section.

4. CONSULTANT SELECTION

Pursuant to California Government Code Section, 4525-4529.5 firms shall be selected on the basis of demonstrated competence and on the professional qualifications necessary for the satisfactory performance of the services required.

If there are any questions regarding this request for proposal, please contact Bozhena Palatnik at (650) 595-7463.

Attachments:

City's Standard Services Contract
City's Quality Assurance Program

CITY OF BELMONT
MASTER
ARCHITECTURAL AND ENGINEERING SERVICES AGREEMENT

On-Call Land Surveying and Mapping Services

This Architectural and Engineering Services Agreement (hereinafter "Agreement") is entered into by the City of Belmont, a municipal corporation (hereinafter "City"), and _____, (hereinafter "Consultant"). City and Consultant may be collectively referred to herein as the "parties."

RECITALS

- A.** City requested a proposal from Consultant to perform on-call land surveying and mapping services. It is anticipated that, as a need arises for Consultant to provide services, the City will issue Task Orders to Consultant in a form substantially similar to that set forth in Exhibit "A", attached hereto and incorporated herein by reference which more particularly describe the scope of services to be performed.
- B.** In reliance upon Consultant's documentation of its qualifications, the City finds that Consultant has demonstrated the requisite qualifications, experience, training, and expertise to perform the requested services.

IN CONSIDERATION OF THE MUTUAL COVENANTS AND CONDITIONS IDENTIFIED HEREIN, THE PARTIES AGREE AS FOLLOWS:

- 1. SCOPE OF SERVICES.** Consultant shall perform the construction management and inspection services described in Exhibit "B" and each Task Order, in accordance with the terms and conditions contained in this Agreement.
- 2. TIME FOR PERFORMANCE.**
 - 2(A).** Time is of the essence in the performance of services under this Agreement and the timing requirements set forth herein shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Consultant shall commence performance, and shall complete all required services no later than the dates set forth in each Task Order. Any services for which times for performance are not specified in this Agreement shall be commenced and completed by Consultant in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Consultant. Consultant shall submit all requests for extensions of time to the City in writing no later than ten (10) days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due.
 - 2(B).** No work shall be performed except to the extent the Consultant receives a Task Order from the City's Authorized Representative. The City will request proposals from the Consultant for each Task Order when services are needed. The Consultant shall respond with a scope and cost proposal in a reasonably prompt manner, no later than fifteen (15) calendar days after the City's request. The proposal shall include a breakdown of estimated hours and work schedule. Upon the City's approval of the terms of the proposal, the City's Authorized Representative shall issue a Task Order against this agreement. Consultant shall commence performance, and shall

complete all required services no later than the dates set forth in accordance with the approved Task Order.

2(C). No work shall be performed after August 31, 2018.

3. **PAYMENT.**

3(A). **Billing.** In order to request payment, Consultant shall submit monthly invoices to the City identifying the services performed and the charges therefore (including an identification of personnel who performed the services, hours worked, hourly rates, and reimbursable expenses), by approved Task Order. The City shall make monthly payments to Consultant for services which are performed in accordance with this Agreement, to the satisfaction of the City.

3(B). **“Not to Exceed” Compensation.** The compensation payable to Consultant for the services shall not exceed the total amount identified in all Task Orders issued by the City against this Agreement. The Consultant shall only be paid for services performed under this Agreement to the extent authorized by written Task Order. No overhead or other expenses can be recovered for interim periods when the Consultant’s services are not utilized by the City.

3(C). **Consultant’s Failure to Perform.** In the event that Consultant performs services which do not comply with the requirements of this Agreement, Consultant shall, upon receipt of written notice from the City, re-perform the services (without additional compensation to the Consultant). If Consultant’s failure to perform in accordance with this Agreement causes damages to the City, Consultant shall reimburse the City for the damages incurred (which may be charged as an offset to Consultant’s payment).

4. **AUTHORIZED REPRESENTATIVES.**

4(A). **Consultant’s Authorized Representative.** Consultant understands that, in entering into this Agreement, the City has relied upon Consultant’s ability to perform in accordance with its representations regarding the qualifications of the Consultant (including the qualifications of its Authorized Representative, its personnel, and its subconsultants, if any). All services under this Agreement shall be performed by, or under the direct supervision of, Consultant’s Authorized Representative.

4(B). **City’s Authorized Representative.** For the performance of services under this Agreement, the Consultant shall take direction from the City’s Authorized Representative, Leticia Alvarez, unless otherwise designated in writing by the City’s Authorized Representative or the City Manager.

5. **INFORMATION AND DOCUMENTATION.**

5(A). **Information from City.** City has made an effort to provide Consultant with all information necessary for Consultant’s performance of services under this Agreement. If Consultant believes additional information is required, Consultant shall promptly notify the City, and the City will provide to Consultant all relevant non-privileged information in City’s possession.

5(B). **Consultant’s Accounting Records.** Consultant shall maintain all accounting records related to this Agreement in accordance with generally accepted accounting principles and state

law requirements, and in no event for less than four years. Consultant's accounting records shall include, at a minimum, all documents which support Consultant's costs and expenses related to this Agreement, including personnel, subconsultant invoices and payments, and reimbursable expenses. Consultant's accounting records shall be made available to City within a reasonable time after City's request, during normal business hours.

5(C). Ownership of Work Product. All original drawings, plans, reports, specifications, calculations, other documents and copyright interests (including all copyrightable interests arising under the 1990 Architectural Works Copyright Protection Act) developed, prepared or discovered by Consultant (including its employees and subconsultants) for this Agreement (collectively "work product"), whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Consultant's services, or upon demand by the City. Consultant shall have a right to make and keep copies of the work product. Consultant shall not reveal the work product, or make it available, to any third party without the prior written consent of the City.

City acknowledges that its use of the work product is limited to the purposes contemplated by the scope of work and that the Consultant makes no representation of the suitability of the work product for use in or application to circumstances not contemplated by the scope of work. The right of the City to modify and reuse the work product for purposes other than that contemplated by the scope of work is subject to the provisions of Business and Professions Code Section 5536.25, 6735, 6735.3 or 6735.4, whichever is applicable.

5(D). Errors/Omissions. Consultant shall correct, at no cost to City, any and all errors, omissions, or ambiguities in the work product submitted to City, provided City gives notice to Consultant. If Consultant has prepared plans and specifications or other design documents to be used in construction of a project, Consultant shall be obligated to correct any and all errors, omissions or ambiguities in the work product discovered prior to and during the course of construction of the project. This obligation shall survive termination of this Agreement.

5(E). Cost Estimates. If the scope of work in a Task Order requires Consultant to submit estimates of probable construction costs, the provisions of this subsection shall apply. If the total estimated construction cost submitted at any phase of design exceeds ten percent (10%) of the City's stated construction budget, Consultant shall make recommendations to the City for aligning the project design with the budget, incorporate City approved recommendations and revise the design to meet the project budget at no additional cost to City.

6. RELATIONSHIP BETWEEN THE PARTIES. Consultant is, and at all times shall remain, an independent contractor solely responsible for all acts of its employees, agents, or subconsultants, including any negligent acts or omissions. Consultant is not City's agent, and shall have no authority to act on behalf of the City, or to bind the City to any obligation whatsoever, unless the City provides prior written authorization to Consultant. Consultant is not an officer or employee of City, and Consultant shall not be entitled to any benefit, right, or compensation other than that provided in this Agreement.

7. CONFLICTS OF INTEREST PROHIBITED. Consultant (including its employees, agents, and subconsultants) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. Consultant shall comply with all requirements of the Political Reform Act (California Government Code Sections 81000, *et seq.*) and other laws relating to

conflicts of interest, including: (a) Consultant shall not make or participate in a decision made by the City if it is reasonably foreseeable that the decision may have a material effect on Consultant's economic interest, and (b) if required by law, Consultant shall file financial disclosure forms with the City Clerk. If Consultant maintains or acquires a conflicting interest, any contract with the City (including this Agreement) involving Consultant's conflicting interest may be terminated by the City.

8. **NONDISCRIMINATION.** Consultant shall not discriminate against any person related to the performance under this Agreement (including any employee or applicant) because of race, color, religious creed, national origin, physical disability, mental disability, medical condition, marital status, sexual orientation, or sex.
9. **COMPLIANCE WITH LAW AND STANDARD OF CARE.** Consultant shall comply with all applicable legal requirements including all federal, state, and local laws (including ordinances and resolutions), whether or not said laws are expressly stated in this Agreement. Consultant shall perform services under this Agreement using a standard of care equal to, or greater than, the degree of skill and diligence ordinarily used by reputable professionals, with a level of experience and training similar to Consultant, performing under circumstances similar to those required by this Agreement.
10. **LABOR COMPLIANCE.** The services to be performed under this Agreement are for "public works" within the meaning of Labor Code Section 1720. Consultant must comply with state prevailing wage and labor law (California Labor Code Sections 1720 through 1861, and Title 8, California Code of Regulations, Chapter 8, Subchapter 3, commencing with Section 16000) for all construction, alteration, demolition, installation, repair or maintenance work over \$1,000 performed under this contract. Consultant's obligations under prevailing wage and labor compliance laws shall include, but not be limited to: pay at least the applicable prevailing wage and travel and subsistence payments for public works activities performed under this Contract; comply with overtime and working hour requirements; comply with apprenticeship obligations; comply with payroll recordkeeping requirements; and comply with other obligations as required by law. Copies of the applicable prevailing wage rates are on file with the City Project Manager, and shall be made available to any interested party upon request. Consultant shall ensure that the above requirements are included in all its contracts and any lower tier subcontracts for activities for the Project.
11. **BUSINESS LICENSE.** The Consultant shall apply for and pay the business tax and registration tax for a business license, in accordance with the Belmont City Code.
12. **INSURANCE.** Consultant must, throughout the duration of this Agreement, maintain insurance to cover Consultant (including its agents, representatives, subconsultants, suppliers, and employees) in connection with the performance of Work under this Agreement, including against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work. This Agreement identifies the minimum insurance levels with which Consultant must comply; however, the minimum insurance levels do not relieve Consultant of any other performance responsibilities under this Agreement (including the indemnity requirements). City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.
- 12(A). **Coverage.** Consultant must maintain insurance in the following minimum levels:

- 12(A)(1). Workers' Compensation.** Workers' compensation coverage as required by the State of California, with statutory limits.
- 12(A)(2). Commercial General Liability (CGL).** Commercial general liability with coverage at least as broad as ISO form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury \$1,000,000 per occurrence. and \$2,000,000 aggregate.
- 12(A)(3). Employer's Liability.** Employer's liability in an amount not less than \$1,000,000 per accident for bodily injury or disease.
- 12(A)(4). Automobile Liability.** Automobile liability with coverage at least as broad as ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, hired, (Code 8) and non-owned autos (Code 9) in an amount not less than \$1,000,000 per accident for bodily injury and property damage (coverage required to the extent applicable to Consultant's vehicle usage in performing services hereunder).
- 12(A)(5). Professional Liability.** For design-build projects, or if the Work requires Consultant to provide professional services related to environmental hazards, professional liability in an amount not less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.
- 12(B). Additional Coverage.** Consultant may carry, at its own expense, any additional insurance it deems necessary or prudent. If Consultant maintains higher levels than the minimums shown above, City requires and shall be entitled to coverage for the higher limits maintained by Consultant. Any available insurance proceeds in excess of the specified minimum levels of insurance and coverage shall be available to the City.
- 12(C). Insurer Qualifications.** Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the Entity. Exception may be made for the State Compensation Insurance Fund when not specifically rated.
- 12(D). Deductibles.** Any deductibles or self-insured retentions must be declared to and approved by City. At the option of City, either:
- 12(D)(1).** Consultant must reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or,
- 12(D)(2).** Consultant must provide a financial guarantee satisfactory to City guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- 12(E). Subrogation Waiver.** Consultant hereby grants to City a waiver of any right to subrogation which any insurer of Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy must be endorsed with a waiver of subrogation in favor of City for all work performed by Consultant, its employees, agents and subcontractors. This provision applies regardless of whether or not the City has requested or received a waiver of subrogation endorsement from the insurer.
- 12(F). Evidence of Coverage.** Concurrently with the execution of this Agreement, Consultant

must furnish City with original certificates and amendatory endorsements, or copies of information or declaration page listing all policy endorsements of the insurance required hereunder. However, failure to obtain the required documents before the work beginning shall not waive Consultant's obligation to provide them. City reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

12(G). Endorsements. The insurance policies must be endorsed as follows:

12(G)(1). For commercial general liability and automobile liability insurance, the City (including its elected officials, employees, and agents) must be named as an additional "insured". The endorsement must include liability arising out of work or operations performed by or on behalf of Consultant including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired or borrowed by or on behalf of Consultant. For commercial general liability, the policy must be endorsed with a form at least as broad as ISO form CG 20 10, GC 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used.

12(G)(2). Consultant's insurance is primary to any other insurance (including self-insurance) available to the City (including its elected officials, employees, and agents) with respect to any claim arising out of this Agreement. Any insurance maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

12(G)(3). No policy shall be canceled, limited, or allowed to expire without renewal until after 30 days written notice has been given to the City by first class mail.

12(H). Claims Made Policies. If any required coverage is made on a claims-made form:

12(H)(1). The "Retro Date" must be shown, and must be before the date of the contract or the beginning of contract work.

12(H)(2). Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

12(H)(3). If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a "Retro Date" prior to the contract effective date, Consultant must purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.

12(H)(4). A copy of the claims reporting requirements must be submitted to City for review.

12(H)(5). If the services involve lead-based paint or asbestos identification/remediation, Consultant's Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, Consultant's Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

12(I). Subcontractors. Consultant must require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant must ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors

must provide coverage with a format least as broad as CG 20 38 04 13.

13. **REPORTING DAMAGES.** If any damage (including death, personal injury or property damage) occurs in connection with the performance of this Agreement, Consultant shall immediately notify the City Risk Manager's office by email at finance@belmont.gov, and Consultant shall promptly submit to the City's Risk Manager and the City's Authorized Representative, a written report (in a form acceptable to the City) with the following information: (a) name and address of the injured or deceased person(s), (b) name and address of witnesses, (c) name and address of Consultant's insurance company, and (d) a detailed description of the damage and whether any City property was involved.

14. **INDEMNIFICATION.**

- 14(A). **General Indemnification and Defense.** Other than in the performance of design professional services, to the fullest extent permitted by law, Consultant shall immediately defend and indemnify the City and its elected officials, officers, employees and agents ("Indemnified Parties") from and against all liability of every kind, nature and description that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, any services performed under this Agreement by Consultant, any Subcontractor, anyone directly or indirectly employed by them, or anyone that they control. If it is finally adjudicated that liability is caused by the comparative active negligence or willful misconduct of an indemnified party, then Consultant's obligation to indemnify for the liability shall be reduced in proportion to the established comparative liability.

14(B). **Design Professional Services Indemnification and Defense.**

- 14(B)(1). To the fullest extent permitted by law, with respect to the performance of design professional services as defined by Civil Code Section 2782.8, Consultant shall indemnify and defend the City, its elected officials, officers, employees and agents, from all liability of every kind, nature and description that arise out of, pertain to or relate to the negligence, recklessness, or willful misconduct of Consultant or Consultant's officers or employees.

- 14(B)(2). Consultant's obligation to indemnify applies unless it is finally adjudicated that the liability was caused by the sole active negligence or sole willful misconduct of an indemnified party. If it is finally adjudicated that liability is caused by the comparative active negligence or willful misconduct of an indemnified party, then Consultant's obligation to indemnify for the liability shall be reduced in proportion to the established comparative liability.

- 14(B)(3). If it is finally adjudicated that liability was caused by the comparative active negligence or willful misconduct of an indemnified party, Consultant may submit a claim to the City for reimbursement of reasonable attorneys' fees and defense costs in proportion to the established comparative liability of the indemnified party.

- 14(C). **Duty to Defend.** The duty to defend is a separate and distinct obligation from Consultant's duty to indemnify. Consultant shall be obligated to defend, in all legal, equitable, administrative, or special proceedings. An allegation or determination that persons other than Consultant are responsible for the claim does not relieve Consultant from its separate and distinct obligation to defend under this section. The obligation to defend extends through final judgment, including exhaustion of any appeals. The defense obligation includes an obligation to provide independent

defense counsel if Consultant asserts that liability is caused in whole or in part by the negligence or willful misconduct of the indemnified party. If it is finally adjudicated that liability was caused by the comparative active negligence or willful misconduct of an indemnified party, then Consultant's obligation to pay the costs of defense shall be reduced in proportion to the established comparative liability of the indemnified party.

14(D). Consultant must cooperate, at no additional cost to the city, in the defense of any claims.

14(E). Parties will work in good faith to procure applicable insurance coverage for the cost of any defense arising from all claims, demands or liability that arise out of, pertain to or relate to the negligence, recklessness, or willful misconduct of Consultant or Consultant's officers or employees. The provisions of this section are not limited by the requirements in this Agreement related to insurance.

14(F). Enforcement Costs. Consultant agrees to pay any and all costs the City incurs enforcing the indemnity and defense provisions set forth in this section.

14(G). Covered Liabilities. Liabilities subject to the duties to defend and indemnify in subsections (A) and (B) include, without limitation, all claims, demands, damages, costs, expenses, penalties, fines, and judgments; associated investigation and administrative expenses; defense costs, including but not limited to reasonable attorneys' fees; court costs; and costs of alternative dispute resolution.

15. TERM OF THE AGREEMENT. The term of this Agreement shall commence on the date last signed by the parties, below, and shall continue until completion of all services in accordance with the timing requirements set forth in Exhibit "A" and paragraph 2 of this Agreement. This Agreement may be terminated by the City without cause upon fifteen (15) days written notice to Consultant. If the City exercises its right to terminate this Agreement in accordance with this paragraph, the City shall pay Consultant for all services satisfactorily performed in accordance with this Agreement, through and including the date of termination, but not to exceed the payments according to the rates specified in Exhibit "B" or the maximum amount authorized under paragraph 3 of this Agreement.

16. DEFAULT. If either party ("demanding party") has a good faith belief that the other party ("defaulting party") is not complying with the terms of this Agreement, the demanding party shall give written notice of the default (with reasonable specificity) to the defaulting party, and demand the default to be cured within ten days of the notice. If: (a) the defaulting party fails to cure the default within ten days of the notice, or, (b) if more than ten days are reasonably required to cure the default and the defaulting party fails to give adequate written assurance of due performance within ten days of the notice, then (c) the demanding party may terminate this Agreement upon written notice to the defaulting party.

17. NOTICES. All notices required or contemplated by this Agreement shall be in writing and shall be delivered to the respective party as set forth in this section. Communications shall be deemed to be effective upon the first to occur of: (a) actual receipt by a party's Authorized Representative, or (b) actual receipt at the address designated below, or (c) three working days following deposit in the United States Mail of registered or certified mail sent to the address designated below. The Authorized Representative of either party may modify their respective contact information identified in this section by providing notice to the other party.

City of Belmont Master Architectural and Engineering Services Agreement
On-Call Construction Management and Inspection

TO: City of Belmont

To: Consultant

Attn: Bozhena Palatnik, P.E.
Public Works Department
One Twin Pines Lane, Suite 385
Belmont, CA 94002

Attn: .

18. **HEADINGS.** The heading titles for each paragraph of this Agreement are included only as a guide to the contents and are not to be considered as controlling, enlarging, or restricting the interpretation of the Agreement.
19. **SEVERABILITY.** If any term of this Agreement (including any phrase, provision, covenant, or condition) is held by a court of competent jurisdiction to be invalid or unenforceable, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in full force and effect; provided, however, this paragraph shall not be applied to the extent that it would result in a frustration of the parties' intent under this Agreement.
20. **GOVERNING LAW, JURISDICTION, AND VENUE.** The interpretation, validity, and enforcement of this Agreement shall be governed by and interpreted in accordance with the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Mateo.
21. **ASSIGNMENT AND DELEGATION.** This Agreement, and any portion thereof, shall not be assigned or transferred, nor shall any of the Consultant's duties be delegated, without the written consent of the City. Any attempt to assign or delegate this Agreement without the written consent of the City shall be void and of no force or effect. A consent by the City to one assignment shall not be deemed to be a consent to any subsequent assignment.
22. **MODIFICATIONS.** This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both parties.
23. **WAIVERS.** Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.
24. **CONFLICTS.** If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or any documents expressly incorporated, the terms and conditions of this Agreement shall control.
25. **ENTIRE AGREEMENT.** This Agreement, including all documents incorporated herein by reference, comprises the entire integrated understanding between the parties concerning the services described herein. This Agreement supersedes all prior negotiations, agreements, and understandings regarding this matter, whether written or oral. The documents incorporated by reference into this Agreement are complementary; what is called for in one is binding as if called for in all.
26. **SIGNATURES.** The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on

**City of Belmont Master Architectural and Engineering Services Agreement
On-Call Construction Management and Inspection**

behalf of the respective legal entities of the Consultant and the City. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the City and Consultant do hereby agree to the full performance of the terms set forth herein.

CITY OF BELMONT	CONSULTANT
By: _____ Greg Scoles, City Manager	By: _____ _____ (print name) (print title)
Date: _____	Date: _____
APPROVED AS TO FORM	By: _____ _____ (print name) (print title)
_____ Scott M. Rennie, City Attorney	Date: _____
FUNDING VERIFIED	
_____ Thomas Fil, Finance Director	

SAMPLE TASK ORDER

TASK ORDER NO. [INSERT TASK No.**]
TO MASTER ARCHITECTURE AND ENGINEERING SERVICES AGREEMENT**

This Task Order No. _____ ("Task Order") is made and entered into by and between the City of Belmont, a municipal corporation and _____ ("Consultant").

RECITAL

- A. City and Consultant entered into an agreement entitled Master Architecture and Engineering Services Agreement ("Agreement"), by which the Consultant agreed to perform geotechnical design review services in accordance with Task Orders issued by the City.

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. **INCORPORATION BY REFERENCE.** This Task Order hereby incorporates by reference all terms and conditions set forth in the Agreement.
2. **SCOPE OF TASK ORDER.** Consultant shall perform the services described in Exhibit "1," attached hereto and incorporated herein by reference, in accordance with the terms and conditions of the Agreement.
3. **PAYMENT.** For services performed by Consultant in accordance with this Task Order, City will compensate Consultant in accordance with the terms and conditions of the Agreement, in an amount not to exceed \$_____ (including all hourly billings as well as reimbursable costs).
4. **SIGNATURES.** The individuals executing this Task Order represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Task Order on behalf of the respective legal entities of the Consultant and the City.

IN WITNESS WHEREOF, the City and Consultant do hereby agree to the full performance of the terms set forth herein.

City of Belmont

Consultant

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____
Tax ID No.: _____

QUALITY ASSURANCE PROGRAM (QAP)



City of Belmont, CA

The purpose of this program is to provide assurance that the materials incorporated into the construction projects are in conformance with the contract specifications. This program should be updated every five years or more frequent if there are changes of the testing frequencies or to the tests themselves. To accomplish this purpose, the following terms and definitions will be used:

DEFINITION OF TERMS

- Acceptance Testing (AT) – Sampling and testing, or inspection, to determine the degree of compliance with contract requirements.
- Independent Assurance Program (IAP) – Verification that AT is being performed correctly by qualified testers and laboratories.
- Quality Assurance Program (QAP) – A sampling and testing program that will provide assurance that the materials and workmanship incorporated into the construction project are in conformance with the contract specifications. The main elements of a QAP are the AT, and IAP.
- Source Inspection – AT of manufactured and prefabricated materials at locations other than the job site, generally at the manufactured location.

MATERIALS LABORATORY

The City of Belmont will use private consultant materials laboratory to perform AT on Federal-aid and other designated projects. The materials laboratory shall be under the responsible management of a California registered Engineer with experience in sampling, inspection and testing of construction materials. The Engineer shall certify the results of all tests performed by laboratory personnel under the Engineer's supervision. The materials laboratory shall contain certified test equipment capable of performing the tests conforming to the provisions of this QAP.

The materials laboratory used shall provide documentation that the laboratory complies with the following procedures:

1. Correlation Testing Program – The materials laboratory shall be a participant in one or more of the following testing programs:
 - a. AASHTO Materials Reference Laboratory (AMRL)
 - b. Cement and Concrete Reference Laboratory (CCRL)
 - c. Caltrans' Reference Samples Program (RSP)
2. Certification of Personnel – The materials laboratory shall employ personnel who are certified by one or more of the following:
 - a. Caltrans District Materials Engineer
 - b. Nationally recognized non-Caltrans organizations such as the American Concrete Institute, Asphalt, National Institute of Certification of Engineering Technologies, etc.
 - c. Other recognized organizations approved by the State of California and/or recognized by local governments or private associations.

3. **Laboratory and Testing Equipment** – The materials laboratory shall only use laboratory and testing equipment that is in good working order. All such equipment shall be calibrated at least once each year. All testing equipment must be calibrated by impartial means using devices of accuracy traceable to the National Institute of Standards and Technology. A decal shall be firmly affixed to each piece of equipment showing the date of the last calibration. All testing equipment calibration decals shall be checked as part of the IAP.

ACCEPTANCE TESTING (AT)

AT will be performed by a materials laboratory certified to perform the required tests. The tests results will be used to ensure that all materials incorporated into the project are in compliance with the contract specifications.

Testing methods will be in accordance with the CT Methods or a national recognized standard (i.e., AASHTO, ASTM, etc.) as specified in the contract specifications.

Sample locations and frequencies may be in accordance with the contract specifications. If not so specified in the contract specifications, samples shall be taken at the locations and frequencies as shown in Attachment #1 (Appendix D, "Acceptance Sampling and Testing Frequencies" of the California Department of Transportation QAP Manual for use by Local Agencies).

INDEPENDENT ASSURANCE PROGRAM (IAP)

IAP shall be provided by personnel from Caltrans or consultant's certified materials laboratory. IAP will be used to verify that sampling and testing procedures are being performed properly and that all testing equipment is in good condition and properly calibrated.

IAP personnel shall be certified in all required testing procedures, as part of IAP, and shall not be involved in any aspect of AT.

IAP shall be performed on every type of materials test required for the project. Proficiency tests shall be performed on Sieve Analysis, Sand Equivalent, and Cleanness Value tests. All other types of IAP shall be witness tests.

Poor correlation between acceptance tester's results and other test results may indicate probable deficiencies with the acceptance sampling and testing procedures. In cases of unresolved discrepancies, a complete review of AT shall be performed by IAP personnel, or an independent materials laboratory chosen by the City of Belmont. IAP samples and tests are not to be used for determining compliance with contract requirements. Compliance with contract requirements is determined only by AT.

REPORTING ACCEPTANCE TESTING RESULTS

The following are time periods for reporting material test results to the Resident Engineer:

- When the aggregate is sampled at material plants, test results for Sieve Analysis, Sand Equivalent and Cleanness Value should be submitted to the Resident Engineer within 24 hours after sampling.
- When materials are sampled at the job site, test results for compaction and maximum density should be submitted to the Resident Engineer within 24 hours after sampling.
- When soils and aggregates are sampled at the job site:
 - 1) Test results for Sieve Analysis, Sand Equivalent and Cleanness Value should be submitted to the Resident Engineer within 72 hours after sampling.
 - 2) Test results for "R" Value and asphalt concrete extraction should be submitted to the Resident Engineer within 96 hours after sampling.

When sampling products such as Portland Cement Concrete (PCC), cement-treated base (CTB), hot mix asphalt (HMA), and other such materials; the time of such sampling shall be varied with respect to the time of the day insofar as possible, in order to avoid a predictable sampling routine. The reporting of AT results, if not performed by the Resident Engineer's staff, shall be done on an expedited basis such as by fax or telephone.

TESTING OF MANUFACTURED MATERIALS

During the Design phase of the project, the Project Engineer may submit a "Source Inspection Request" see Attachment#2 (Exhibit 16-V of the LAPM) to the City of Belmont, consultant, or Caltrans for inspection and testing of manufactured and prefabricated materials by their materials laboratory. A list of materials that can be typically accepted on the basis of certificates of compliance during construction is found in Attachment #3 (Appendix F of the California Department of Transportation QAP Manual for use by Local Agencies). All certificates of compliance shall conform to the requirements of the contract specifications, for examples see Attachment #4 (Appendix J of the California Department of Transportation QAP Manual for use by Local Agencies).

Should the City of Belmont request Caltrans to conduct the source inspection, and the request is accepted, all sampling, testing, and acceptance of manufactured and prefabricated materials will be performed by Caltrans' Office of Materials Engineering and Testing Services.

For Federal-aid projects on the National Highway System (NHS), Caltrans will assist in certifying the materials laboratory, and the acceptance samplers and testers. For Federal-aid projects off the NHS, Caltrans may be able to assist in certifying the materials laboratory, and the acceptance samplers and testers.

PROJECT CERTIFICATION

Upon completion of a Federal-aid project, a "Materials Certificate", shall be completed by the Resident Engineer. The City of Belmont shall include a "Materials Certificate" in the Report of Expenditures submitted to the Caltrans District Director, Attention: District Local Assistance Engineer. A copy of the "Materials Certificate" shall also be included in the City of Belmont's construction records. The Resident Engineer in charge of the construction function for the City of Belmont shall sign the certificate. All materials incorporated into the work which did not conform to specifications must be explained and justified on the "Materials Certification", including changes by virtue of contract change orders. See Attachment # 5 for an example (Appendix K of the California Department of Transportation QAP Manual for use by Local Agencies).

RECORDS

All material records of samples and tests, material releases and certificates of compliance for the construction project shall be incorporated into the Resident Engineer's project file. If a Federal-aid project:

- The files shall be organized as described in Section 16.8 "Project Files" of the Local Assistance Procedures Manual.
- It is recommended that the complete project file be available at a single location for inspection by Caltrans and Federal Highway Administration (FHWA) personnel.
- The project files shall be available for at least three years following the date of final project voucher.
- The use of a "Log Summary," as shown in Appendix H of the QAP Manual, facilitates reviews of material sampling and testing by Caltrans and FHWA, and assists the Resident Engineer in tracking the frequency of testing.

When two or more projects are being furnished identical materials simultaneously from the same plant, it is not necessary to take separate samples or perform separate tests for each project; however, copies of the test reports are to be provided for each of the projects to complete the records.

APPROVED BY: _____

(Signature)

RCE#44887 (Exp.3/31/2016)

NAME: Afshin Oskoui

DATE: January 13, 2015

TITLE: Public Works Director - City of Belmont



Appendix D - Acceptance Sampling and Testing Frequencies

Note: It may be desirable to sample and store some materials. If warranted, testing can be performed at a later date.

Portland Cement (Hydraulic Cement)

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Cement/fly ash (Sampling only)	8-lb. sample	If possible, take a least one sample per job, even if the material is accepted based on a Certificate of Compliance.	ASTM D75, C494 CT 125 AASHTO T127, M85, M295	Standard for sampling hydraulic cement or fly ash.
Cement (Testing Only)	8-lb. sample	If the product is accepted based on a Certificate of Compliance, testing is not required. If the product is not accepted using a Certificate of Compliance, test at least once per job.	ASTM C109 CT 515 AASHTO T106	If testing appears warranted, fabricate six 2-in. mortar cubes using the Portland (or hydraulic cement). Test for compressive strength.

Portland Cement Concrete (Hydraulic Cement Concrete)

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Aggregate for Hydraulic Cement Concrete (Sampling & Testing)	50-lb. sample	Take one aggregate sample for each 1000 cu. yd. of PCC/HCC concrete. Test at least one sample per job.	ASTM D75 CT 125 AASHTO M6, T2, M80	Sample aggregate from belt or hopper (random basis).
Water (Sampling & Testing)	Take a two-quart sample using a clean plastic jug (with lining) and sealed lid. Sample at the point of use.	If the water is clean with no record of chlorides or sulfates greater than 1%, no testing is required. If the water is dirty do not use it. Test only when the chloride or sulfates are suspected to be greater than 1%.	CT 405, CT 422, CT 417 AASHTO R23	If testing appears warranted, test for chlorides and sulfates.



Appendix D (continued)

Portland Cement Concrete (Hydraulic Cement Concrete) – Continued

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description of Comments
Air Entraining Admixtures (Sampling & Testing)	Take a one-quart sample using a clean, lined can or plastic bottle, if liquid. If powder, take a 2.5 lb. sample.	If the product is accepted based on a Certificate of Compliance, testing is not required. Take one sample per job. Prior to sampling, check with Caltrans (METS) for acceptable brands and dosage rates.	ASTM C233 AASHTO M154, T157, C260	If testing appears warranted, test for sulfates and chlorides. Admixtures with sulfates and chlorides greater than 1% should not be used.
Water Reducers or Set Retarders (Sampling & Testing)	If liquid, take a 1-qt. sample using a clean plastic can. If powder, take a 2.5 lb. sample.	If the product is accepted based on a Certificate of Compliance, no testing is required. If not, test once per job. Prior to using this product, please check with Caltrans (METS) for acceptable brands and dosage rates.	ASTM C494 AASHTO M194	If testing appears warranted, test for sulfates and chlorides. Admixtures with sulfates and chlorides greater than 1% should not be used.
Freshly-Mixed Concrete (Sampling)	Approx. 150lb. (or 1 cu. ft.) near mixer discharge.	When tests are required, take at least one sample for each 500 to 1000 cu. yd. of PCC/HCC.	ASTM C172, C685 CT 539 AASHTO T141, M157	This describes a method to sample freshly-mixed concrete.
Freshly-Mixed Concrete (Testing)	Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge.	On projects with 500 cu. yd., or more, test at least one sample per job.	ASTM C143 AASHTO T119	This test determines the slump of the freshly-mixed concrete.
Freshly-Mixed Concrete (Testing)	Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge	On projects with 500 cu. yd., or more, test at least one sample per job.	ASTM C360 CT 533	This test determines the ball penetration of the freshly-mixed concrete.
Freshly-Mixed Concrete (Testing)	Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge	On projects with 500 cu. yd., or more, test at least one sample per job.	ASTM C231 CT 504 AASHTO T152	This test determines the air content of freshly-mixed concrete (pressure method).
Freshly-Mixed Concrete (Testing)	Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge	On projects with 500 cu. yd., or more, test at least one sample per job.	ASTM C138 CT 518 AASHTO T121	This test determines the unit weight of freshly mixed concrete.



Appendix D (continued)

Portland Cement Concrete (Hydraulic Cement Concrete) – Continued

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Freshly-Mixed Concrete (Testing)	Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge	Fabricate at least two concrete cylinders per project. Test for compressive strength at least once for every 500 to 1,000 cu. yd. of structural concrete.	ASTM C39 CT 521 AASHTO T22	This test is used to fabricate 6" x 12" concrete cylinders. Compressive strengths are determined, when needed.
Freshly-Mixed Concrete (Testing)	Approximately 210 lb. of concrete are needed to fabricate three concrete beams.	One sample set for every 500 to 1,000 cu. yd. of concrete.	ASTM C78 CT 31 AASHTO T97 & T23	This test is used to determine the flexural strength of simple concrete beams in third-point loading

Soils and Aggregates

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Aggregate (Sampling)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM D75 CT 125 AASHTO T2	This test describes the procedures to sample aggregate from the belt or hopper (random basis).
Fine Aggregates (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM C128 CT 208 AASHTO T84	This test determines the apparent specific gravity of fine aggregates for bituminous mixes, cement treated bases and aggregate bases.
Fine Aggregate (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM C128 CT 207 AASHTO T84	This test determines the bulk specific gravity (SSD) and the absorption of material passing the No. 4 sieve.
Coarse Aggregate (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	CT 206	This test determines the cleanness of coarse aggregate.



Appendix D (continued)

Soils and Aggregates - Continued

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Coarse Aggregate (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM C127 CT 227 AASHTO T85	This test determines the specific gravity and absorption of coarse aggregate (material retained on the No. 4 sieve).
Soils and Aggregates (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM C136 CT 202 AASHTO T27	This test determines the gradation of soils and aggregates by sieve analysis.
Soils and Aggregates (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM D2419 CT 217 AASHTO T176	This test determines the Sand Equivalent of soils and aggregates.
Soils and Aggregates (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM C117 AASHTO T11	This test determines the gradation for materials finer than the No. 200 sieve (by washing method).
Soils and Aggregates (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM D3744 CT 229 AASHTO T210	This test determines the Durability Index of soils and aggregates.
Soils and Aggregates (Testing)	One 50-lb. sample	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM D2844 CT 301 AASHTO T190	This test determines the Resistance Value (R-) and expansion pressure of compacted materials.
Soils and Aggregates (Testing)	One random location for every 2,500 sq. ft.	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM D2922 CT 231 AASHTO T238	This test determines field densities using the nuclear gage.
Soils and Aggregates (Testing)	One random location for every 2,500 sq. ft.	Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.	ASTM D3017 CT 231 AASHTO T239	This test determines the water content using the nuclear gage.



Appendix D (continued)

Asphalt Binder

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Asphalt Binder (Sampling)	One 0.5-gal. sample placed in a clean, sealed can.	Sample once per job at the asphalt concrete plant.	CT 125 ASTM D 979 AASHTO T 168, T48	This procedure describes the proper method to sample the asphalt binder.
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Sample once per job at the asphalt concrete plant.	ASTM D92, D117 AASHTO T 48	This test determines the flash point of the asphalt binder (by Cleveland open cup).
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D2872 & D92 CT 346 AASHTO T240 & T48	This test determines the rolling thin-film oven test (RTFO).
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D2042 AASHTO T44	This test determines the solubility of asphalt material in trichloroethylene.
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D2171 AASHTO T202	This test determines the dynamic viscosity, (absolute viscosity of asphalt @ 140 degrees F by the Vacuum Capillary Viscometer Poises).
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D5 AASHTO T49	This test determines the penetration of bituminous material @ 77 degrees F and percentage of original penetration from the residue.
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D113 AASHTO T51	This test determines the ductility of asphalt @ 77 degrees F.
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D2170 AASHTO T201	This test determines the kinematic viscosity of asphalt @ 275 degrees F (Centistoke).



Appendix D (continued)

Asphalt Binder - Continued

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D2171 AASHTO T202	This test determines the dynamic viscosity. (absolute viscosity of asphalt @ 140 degrees F by the Vacuum Capillary Viscometer Poises).
Asphalt Binder (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D36 AASHTO T53	This test determines the softening point of asphalt.

Asphalt Emulsified

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Emulsified Asphalt (Sampling)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D140, D979 CT 125 AASHTO T 40, T168	This test describes the procedure to sample the emulsified asphalt.
Emulsified Asphalt (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D244 AASHTO T59	This test determines the sieve retention of emulsified asphalt.
Emulsified Asphalt (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D244 AASHTO T59	This test determines the weight per gallon of emulsified asphalt.
Emulsified Asphalt (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D244 AASHTO T59	This test determines the penetration of the emulsified asphalt.
Emulsified Asphalt (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D244 CT 330 AASHTO T59	This test determines the residue @ 325 degrees F evaporation of emulsified asphalt.



Appendix D (continued)

Asphalt Emulsified - Continued

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Emulsified Asphalt (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D4402 AASHTO T201	This test determines the Brookfield viscosity.
Emulsified Asphalt (Testing)	One 0.5-gal. sample placed in a clean, sealed can.	Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.	ASTM D88 AASHTO T72	This test determines the Saybolt-Furol viscosity of emulsified asphalt @ 77 degrees F (seconds).

Hot Mix Asphalt (Asphalt Concrete) - Concrete

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Asphalt Concrete (Sampling)	Obtain one 30-lb. sample each day of production	Obtain one sample at the asphalt concrete plant for each 5,000 tons of asphalt concrete placed.	ASTM D75, D140, D979 CT 125 AASHTO T 40, T168	This test describes the procedure to sample the asphalt concrete.
Asphalt Concrete (Testing)	4" x 8" cores	Take one 4" x 8" core for every 500 ft of paved roadway.	ASTM D1188, D1560, D1561, D5361 CT 304 AASHTO T246, T247	This test determines the field density of street samples.
Asphalt Concrete (Testing)	Obtain one 30-lb. sample for each day of production	Obtain one sample for every five cores taken.	ASTM D1188, D1560, D1561, D5361 CT 304 AASHTO T246, T247	This test determines the laboratory density and relative compaction of asphalt concrete.
Asphalt Concrete (Testing)	4" x 8" cores	Obtain one sample for every five cores taken.	ASTM D2726, D1188, D5361	This test determines the specific gravity of compacted bituminous mixture dense-graded or non-absorptive.



Appendix D (continued)

Hot Mix Asphalt (Asphalt Concrete) –Continued

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Asphalt Concrete (Testing)	One 30-lb sample	Obtain one sample for every 1,000 tons of asphalt concrete.	ASTM D1559 AASHTO T245	This test determines the resistance to plastic flow of prepared mixes as determined by the Marshall Method.
Asphalt Concrete (Testing)	One 30-lb sample	Obtain one sample for every 1,000 tons of asphalt concrete.	ASTM C117, D2172 (use Method B) AASHTO T164	This test determines the screen analysis of aggregates recovered from asphalt materials.
Geotextile Fabric (Placed Under the Asphalt Concrete) (Testing)	One 12 ft. x 3 ft. sample	Obtain one sample per job.	ASTM D4632 AASHTO M288	This test determines the weight per sq. yd. and grabs strength of geotextile fabrics.
Asphalt Concrete (Testing)	Sample any test location (random basis)	Obtain one sample for every 1,000 tons of asphalt concrete.	ASTM D2950 CT 375	This test determines the nuclear field density of in-place asphalt concrete.
Asphalt Concrete (Testing)	One 10-lb sample	Obtain one sample during every day of production.	ASTM D1560, D1561 CT 366 AASHTO T246, T247	This test determines the stability value of asphalt concrete.
Slurry Seals (Sample)	One 0.5 gal. sample in a clean, dry plastic container.	Obtain one sample per truck	ASTM D979 CT 125 AASHTO T 40, T168	This test describes the procedure for sampling the slurry seal.
Aggregate for Slurry Seals (Testing)	One 30-lb. sample.	Obtain at least one sample per project from the belt or hopper or stockpile and test for Sand Equivalent	ASTM D2419 CT 217 AASHTO T176	This test determines the Sand Equivalent of aggregates.

Appendix D (continued)

Slurry Seals

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Aggregate for Slurry Seals (Testing)	One 30-lb. sample.	Obtain at least one sample per project from the belt, hopper, or stockpile and test for sieve analysis of fine sand.	ASTM C117 AASHTO T11	This test determines the sieve analysis of fine sand (gradation of materials finer than No. 200 sieve by wash grading).
Slurry Seals (Testing)	One 0.5 gal. sample in a clean, dry plastic container.	Test one sample per project and test for Abrasion.	ASTM D3910	This test determines the Wet Track Abrasion Test (2) (WTAT).

Steel

Materials to be Sampled or Tested	Sample Size	Sampling/Testing Frequency	Typical Test Methods	Description or Comments
Steel Strand (Testing)	Sample strand at various sizes.	This item may be accepted using a Certificate of Compliance. Sample and test at least two steel strands per job when a Certificate of Compliance is not used.	ASTM A370, A416, E328 AASHTO T244	This test determines the tensile strength of uncoated seven-wire stress-relieved strand for pre-stressed concrete.
Steel Rebar (Testing)	Sample rebar at various sizes.	This item may be accepted using a Certificate of Compliance. Sample and test at least two steel rebar per job when a Certificate of Compliance is not used.	ASTM A615, A370 AASHTO T244	This test determines the steel reinforcement bar tensile strength and bend capability.

**SAMPLE COVER MEMO
SOURCE INSPECTION REQUEST
FROM LOCAL AGENCY TO
CALTRANS' DISTRICT LOCAL ASSISTANCE ENGINEER**
(Prepared By Applicant On Applicant Letterhead)

To: (name)
Caltrans' District Local Assistance Engineer
Caltrans' Local Assistance Office
(district office address)

Date: _____

Federal-aid Project Number: (if one has been assigned)

Project Description: _____

Project Location: _____

Subject: *(Source Inspection for Project Name, County)*

We are requesting that Caltrans provide Source Inspection (reimbursed) services for the above mentioned project. We understand we are responsible for paying for this service provided for by the State. Listed below are the materials for which we are requesting Caltrans' Source Inspection (reimbursed) services.

Materials that will require source inspection:

Justification for request: (Based on the requirements in Section 16.14 under "Source Inspection") _____

Any question you might have about the above materials should be directed

to: _____, at _____ (phone #) _____.

Approved:

(Applicant Representative Name)

District Local Assistance Engineer

(Title)

(Date)

(Local agency, name & address)



Appendix F - Construction Materials Accepted by a Certificate of Compliance *

Soil Amendment
Fiber
Mulch
Stabilizing Emulsion
Plastic Pipe
Lime
Reinforcing Steel
Structural Timber and Lumber
Treated Timber and Lumber
Timber and Lumber
Culvert and Drainage Pipe Joints
Reinforced Concrete Pipe
Corrugated Steel Pipe and Corrugated Steel Pipe Arches
Structural Metal Plate Pipe Arches and Pipe Arches
Perforated Steel Pipe
Polyvinyl Chloride Pipe and Polyethylene Tubing
Steel Entrance Tapers, Pipe Down drains, Reducers, Coupling Bands and Slip Joints
Aluminum Pipe (Entrance Tapers, Arches, Pipe Down drains, Reducers, Coupling Bands and Slip Joints)
Metal Target Plates
Electrical Conductors
Portland Cement
Minor Concrete
Waterstop

* If Caltrans Standard Specifications May 2006 is part of contract specifications.

Note: Usually these items are inspected at the site of manufacture or fabrication and reinspected after delivery to the job site.

ATTACHMENT 3



Appendix J.1 - Example of a Vendor's Certificate of Compliance

No. 583408

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
VENDOR'S CERTIFICATE OF COMPLIANCE
MP-6543 (REV. 8/99) HGT-7241-0030-2

☐ PRECAST CONCRETE PRODUCTS OR ☒ SOUNDWALL

TO BILL SYNDER

RESIDENT ENGINEER -- CITY OF FLATLAND

We certify that the product amount, chemical and material information contained in the material data sheets below are brand correct and comply with specifications and:

CONTRACT NUMBER:

CURRENT BRAND

XYZ CEMENT CO.
IT MODIFIED

INSTALL LOCATION

MIDLAND,
CALIFORNIA

CHEMICAL ADJUSTMENT

1. BRAND

ABC AD MIXTURE

MANUFACTURER

XYZ SUPPLIER

TYPE

WATER REDUCER

2. BRAND

TYPE

MANUFACTURER

☐ CHECK BOX IF A CHEMICAL ADJUSTMENT WAS NOT USED

MINERAL ADJUSTMENT

MANUFACTURER

ABC, INC.

CLASS

F

☐ CHECK BOX IF A MINERAL ADJUSTMENT WAS NOT USED

EQUIPMENT DATE

7/1/07

DATE OF FABRICATION (month)

LIST PRODUCTS TO WHICH CERTIFICATE APPLIES (show size and No. of bags, etc., delivery slip numbers for each size.)

Portland Cement
Flyash
Water Reducer

MANUFACTURER'S CONTROL NO. (if known)

A.B. READY MIX

BY AUTHORIZED REPRESENTATIVE SIGNATURE

Joe Anderson

POSITION

Original to file. Copy to be retained.

ONLY IN 2008

ATTACHMENT 4



Appendix J.2 - Example of a Certificate of Compliance for Portland Cement (continued)

This is to certify that the

Portland Cement

Supplied by ABC Cement Company complies with all
requirements for Type II Portland Cement when tested in
accordance with ASTM C - 494.

Local Agency Project No.

HP21L - 5055 - 111

Albert Howakowa

Quality Assurance Engineer
ABC Cement Company

Date: 07/07/07



Appendix K - Examples of Materials Certificates/Exceptions (Signed by the Resident Engineer at the Completion of the Project)

Federal-aid Project No.: Project HP21L – 5055 – 111

Subject: Materials Certification

This is to certify that the results of the tests on acceptance samples indicate that the materials incorporated in the construction work and the construction operations controlled by sampling



and testing were in conformity with the approved plans and specifications.



All materials exceptions to the plans and specifications on this project are noted below.

No exceptions were found to the plans and specifications on this project.

Bill Sanders
Resident Engineer (Print Name)

Bill Sanders
Resident Engineer (Signature)

7/7/07
(Date)

Note: The signed original of this certificate is placed in the Resident Engineer's project files and one copy is mailed to the DLAE and filed under "Report of Expenditures."

See the attachment (next page)



Appendix K (continued)

Attachments: Materials Exceptions (Acceptance Testing)

Type of Test	Description of Work	Total Tests Performed On the Project	Number of Failed Tests	Action Taken
Slump Test	Concrete Sidewalk	8	1	When the measured slump exceeded the maximum limit, the entire concrete load was rejected.
Sand Equivalent	Aggregate for Structural Concrete	10	1	The tested S.E. was 70 and the contract compliance specification was 71 minimum. However, the concrete 28-day compressive strength was 4800 psi. The concrete was considered adequate and no materials deductions were taken.
Compaction	Sub grade Material	12	1	One failed test was noted. The failed area was watered and reworked. When this was completed, a retest was performed. The retest was acceptable.
Compaction	Hot Mix Asphalt	12	1	One failed area was noted. It was reworked and retested. The second test met specifications.

Bill Sanders

Resident Engineer (Print Name)

Bill Sanders

Resident Engineer (Signature)

July 4, 2007

Date